



AT

Docket No.: 1330.1047

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re the Application of:

Arnoud EKKER, et al.

Serial No. 09/353,625

Group Art Unit: 3692

Confirmation No. 3873

Filed: July 15, 1999

Examiner: Nga B. Nguyen

For: A REAL-TIME CHARGE CALCULATION SYSTEM

APPEAL BRIEF

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Final Office Action in the above-identified application, and pursuant to the Notice of Appeal filed February 10, 2006, Applicants submitted an Appeal Brief together with the requisite fee set forth by § 1.17(c) on May 10, 2006 (fee for Notice of Appeal paid on February 10, 2006).

Subsequent to the Appeal Brief filed on May 10, 2006, an Office Action was mailed on October 6, 2006. A telephone call was made to the Examiner and per the discussion, the Appeal Brief re-filed.

I. REAL PARTY IN INTEREST (37 CFR § 41.37(c)(1)(i))

The present application was assigned to American Management Systems, Inc. ("AMS"), as evidenced by an Assignment recorded at Reel/Frame 010116/0762.

AMS has since combined with CGI, with the combined company being called CGI-AMS. Therefore, the real party in interest is CGI-AMS.

II. RELATED APPEALS AND INTERFERENCES (37 CFR § 41.37(c)(1)(ii))

Appellant, Appellants' legal representatives, and assignee are not aware of any prior or pending appeals or interferences which directly affect or be directly affected by, or having a bearing, on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS (37 CFR § 41.37(c)(1)(iii))

Claims 1-34 are currently pending. Claims 1-34 stand finally rejected and are appealed.

IV. STATUS OF AMENDMENTS (37 CFR § 41.37(c)(1)(iv))

No amendment(s) was filed subsequent to the Final Office Action mailed November 10, 2005.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER (37 CFR § 41.37(c)(1)(v))

Generally, the telecommunications industry performs pricing of charges including recurring charges during a billing process. The time and expense (i.e., processing power) required to perform current billing processes is tremendous. This becomes especially problematic as the telecommunications industry continues to grow, offering more complicated services, more combinations of services, and more pricing models, etc., in addition to generating a growing number of events to be created, priced and billed. This results in a shrinking time window for the billing process to be completed.

As services offered by the telecommunications industry become complex, customers benefiting from these services want immediate access to more accurate and up-to-date information of charges for the services. Further, with widely used tools such as the Internet, self-customer care, and on-line banking, etc., customer demands (on-demand requests) are likely to increase.

Typical telecommunications billing systems are conventionally based on calculating charges, with the exception of recurring charges that are generally billed in advance, only for services that have been rendered. Pricing and billing processes in these conventional systems are considered to be indistinct activities, resulting in pricing processes being performed at the last possible moment, which is during the billing process.

As such, there is a need for a system that creates system-created events independent of the billing process and calculates charges for events in real-time for enabling pricing at the earliest reasonable and practical time.

As set forth below, the present invention provides a solution to the above-discussed and other problems by providing a method and system independent of a billing process.

The present invention is directed to "pricing" of events (see, independent claims 1, 11, 14, 19, 25-32 and 35) that is continuously executed as the events become available (i.e., substantially immediately, responsive to the creation, etc.) rather than waiting for a later time when a bill is prepared, a payment is made, or an account inquiry is received (see also, page 2, lines 25-27).

For example, as illustrated in FIG. 6, the system causes the pricing process (160) to exit an idle state (62) upon a determination of existence of a message in a message queue, identifies price plan(s) or subscription for the event (172 and 174) and prices the event (see also, corresponding text of FIG. 6).

Independent claims 1, 11, 19 and 25-32 recite, an event pricing for "a system initiated and created non-usage event[s] independent of user initiated events" including "pricing the system-created non-usage events and/or the non-system-created events independent of a billing process" (claims 1, 25, 28 and 31), "pricing the non-usage events independent of a billing process that includes the user initiated events" (claims 27 and 32) and "pricing the non-usage event independent of a billing process that includes a non-system-created event" (claim 11 and 19) ("independent of a billing process" in claim 29).

Independent claim 14 recites, "all available system initiated and created non-usage events independent of user initiated events for a current billing period are priced at a first opportunity after a prior billing period that includes non-system-created events ends."

Independent claim 33 recites, “executing the real-time calculation of the bill each time an event independent of a user’s initiation occurs”, where the processing of the real-time calculation of the bill is “independent of a billing process having an event responsive to the user’s initiation.”

Independent claim 34 recites, “determining whether a non-usage event independent of a user initiated event and a usage event initiated by a user are available for pricing” and “executing the pricing for the non-usage event and the usage event based on determination of availability for pricing”, where “the non-usage event is available for pricing at a first billing period and the usage event is available for pricing at a second billing period.”

The term “event” identifies a rendered, or a prediction of a rendered product or service (see, page 5, lines 19-21) and “pricing” according to the present invention includes, pricing for “usage events” created by a network when a customer uses a metered service (i.e., long distance calls) and delivered to the system for pricing and billing (see, page 7, line 14-17). In addition, the claimed pricing applies to “non-usage events” that are not initiated by the customer but are rather initiated and created by the system (i.e., a recurring service charge, minimum/maximum charge summary, etc.) and one-time events, for example, a service activation fee (see, page 3, lines 1-4, page 3, line 27 through page 4, line 8; page 6, line 10 through page 7, line 3; FIG. 2 and claims 1, 11, 14, 19, 25-32 and 34).

The claimed invention includes event pricing for events, which are received from the network such as usage events (62) with events that are created by the system or non-usage events (66) on the database server (30) (see also, FIGS. 1 and 2 and corresponding text and claims 1, 11, 14, 19 and 25-34). The events are delivered to a pricing process using a message queue (67) and the pricing process is initiated when a message is detected in the message queue (67) and continues until there are no subsequent messages in the queue (67) (see, page 10, lines 2-8 and FIG. 6). Accordingly, whether an event is a usage event or a non-usage event, pricing is executed for the event as soon as the event is placed in the message queue.

Referring to the time line 140 in FIG. 3, when Date B arrives, a recurring event (a non-usage event) for the period beginning with Date D is created, and the charge is immediately calculated, applied and can be viewed by the customer (see also, page 15, line 26 through page 16, line 21 and claims 16, 17, 23 and 24). Specifically, the charge for this event is available when the billing process on Date C commences (see also, page 15, line 26 through page 16, line 21).

Claims 2, 3 and 7 further recite that the system includes pricing where “all events are priced as they become available to the system”, “charges for all events that are relevant to a billing period are calculated and available in the system at the earliest practical time”, “all system-created events are created at any time based on a flexible schedule independent of a billing process”, respectively, (see also, claims 5, 8, 12, 13, 15, 20 and 22).

Claims 4 and 9 respectively recite that “system initiated and created events for a customer may be created in one of less frequently than the customer is billed, as frequently as the customer is billed and more frequently than the customer is billed” and “charges for all unbilled events are ready for the billing process and ready for display on-demand” (see also, claims 18 and 21).

The present invention is also directed to making “all events available for contribution to summary records for discounting and consolidation” (claim 6), where the pricing process performs “real-time recalculation of a charge for any unbilled event when information in the system which impact the charge has changed” (claim 10) (see also, page 12, line 13 through page 13, line 2). The claimed invention also includes calculating “a recurring charge after an end of a prior billing period and before the billing date for the recurring charge” (claims 16 and 23) and “a minimum or a maximum charge after an end of a prior billing period and before the billing date for the recurring charge” (claims 17 and 24) (see also, page 13, lines 23 through page 14, line 24).

Accordingly, the present invention executes pricing of events as the events occur (i.e., without waiting for a particular billing initiation event to occur), thereby making an up-to-date balance of charges available to the customer at all times whether the customer requests a service or not and reduces the computational demands of the billing process.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 CFR §41.37(c)(1)(vi))

Claims 1-20, 23-29 and 31-33 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,377,938 (Block), claims 21 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Block in view of U.S. Patent No. 6,058,170 (Jagadish) and claims 30 and 34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Block.

VII. ARGUMENT (37 CFR § 41.37(c)(1)(vii))

In the Final Office Action, the Examiner rejected claims 1-20, 23-29 and 31-33 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,377,938 (Block).

Claims 21 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Block in view of U.S. Patent No. 6,058,170 (Jagadish) and claims 30 and 34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Block.

Block is a prepaid system in which call charges are computed (priced) at the real time of the call and immediately subtracted from (billed against) the prepaid balance making call charge pricing integral to (and not independent of) the billing (see, col. 8, lines 14-23). Because Block is remaining-balance-driven, before a user is allowed to make a call, the system checks to see if the account has enough money to allow a call to occur (see, processes starting at 2030 in FIG. 2B of Block). Pricing and billing (against the prepaid balance) together or making pricing integral to the billing is essential to Block. Otherwise, a customer could make a call when there is no prepaid balance to cover the cost of the call. Pricing and billing are not independent in Block.

Block does not specify when fixed charges, such as a monthly equipment fee, are charged. In fact, col. 7, line 65 through col. 8, line 6 of Block, which the Examiner refers to, indicates that processor (60) calculates call charges in real time during a call and updates a subscriber's account with flat charges, such as rental fees and taxes. The Examiner interprets such monthly charges as being equivalent to the call charges (see Office Action mailed November 10, 2005 page 3, lines 15-20). Block handles call charges at the time of a call (see, col. 5, lines 20-31). That is, charging events are tied to customer call events.

In contrast, claims 1, 11, 19 and 25-32 recite pricing for "a system initiated and created non-usage event[s] independent of user initiated events" including "pricing the system-created non-usage events and/or the non-system-created events independent of a billing process" (claims 1, 25, 28 and 31). Independent claims 11, 19, 27, 29 and 32 further recite "pricing the non-usage events independent of a billing process" that includes the "user initiated events" (claims 27 and 32) and "a non-system-created event" (claim 11 and 19).

Independent claims 14, 33 and 34 respectively recite pricing "all available system initiated and created non-usage events independent of user initiated events for a current billing period", "real-time calculation of the bill each time an event independent of a user's initiation

occurs” and “ pricing for the non-usage event and the usage event based on determination of availability for pricing.”

As Block does not specify when the fixed charges are billed, based on the Examiner's interpretation, when a fixed charge event occurs, the system stores the charge because no call charge event has occurred for which the balance must be checked (see, col. 6, lines 36-44). When the next call request arrives, because balance calculations are call event driven, the system checks to see if any fixed charges are pending (stored) and if so, they are priced and immediately billed against the balance (making the pricing integral with and not independent of the billing) (see, “tariff Memory 76” storing information relating to the charges for various types of services such as tariff, taxes and flat rate charges and “detailed use record memory 78” storing information regarding call charges at col. 6, lines 36-44). Then, the system checks to see if the user has sufficient balance to make the call which itself is priced and billed during the call (see, col. 8, lines 43-63). For example, when subscriber A makes a call to subscriber B, a detector/decoder detects information such as subscriber number, the called number, start time of the call, etc., and provides the same to a processor for executing the billing process (see, col. 8, lines 14-23).

The Examiner acknowledges that Block does not disclose system initiated and created events are created according to a schedule in the system and the schedule is created and maintained by the system based on subscription available to the system, but relies on Jagadish as teaching the same. However, the summary information in Jagadish is stored in a summary database that is updated in real-time as calls are placed (see, column 3, lines 42-58). That is, similar to Block, Jagadish updates the information when initiated by calls.

For example, in Jagadish, a customer places calls from calling stations, which causes a corresponding automatic message accounting (AMA) record to be generated (see, FIG. 2 and corresponding text). Then, each AMA record is passed to a call detail for making the record available for call pricing at which point the system applies the customer specific billing to update the summary information stored in the summary database (see, column 3, lines 42-58).

Independent claims 1, 11, 14, 19 and 25-32 recite, “event pricing” for “a system initiated and created non-usage event[s] independent of user initiated events.”

Similarly, independent claims 33 and 34 recite, “executing the real-time calculation of the bill each time an event independent of a user's initiation occurs” and “executing the pricing for

the non-usage event and the usage event based on determination of availability for pricing", respectively.

In light of the above, Applicants respectfully submit that the claimed "event pricing" in each of the independent claims is independent and distinct from the billing process. Merriam-Webster Online Dictionary defines "pricing" as "to set a price on", "to find out the price of" and defines "billing" as "to enter in an accounting system: prepare a bill of (charges)", "to submit a bill of charges to" (see, <http://www.m-w.com>). For example, according to the present invention, although first and second users may be billed on the same day, the first user may have one telephone line, the second user may have three telephone lines, where telephone lines may cost \$10 each, but because the second user has three, his lines may be priced differently, such as 3 for \$25.

In contrast, according to the Block and Jagadish system, pricing is tied to billing and vice versa and both are tied to customer call events.

On page 12 of the final Office Action, referring to claim 30, the Examiner states that one-time events such as activation/cancellation fee, purchased equipment fee is well known. Applicants submit that claim 30 is directed to "storing events in a message queue, the events being system initiated and created non-usage events, usage events, one time events" and "pricing the events, the pricing including pricing the non-usage events **independent of a billing process that includes the user initiated events**" (emphasis added). Thus, Applicants respectfully traverse the Examiner's statement and demand the Examiner to produce authority for the statement. Further, even if the Examiner's assertion and rejection based on common knowledge is valid, the present invention is distinguishable as discussed below.

Claim 1

The claimed structure of the event pricing system of claim 1 includes at least one computer "a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events is due to be created and creating the non-usage event." As also recited in claim 1, the present invention includes "a continuously running pricing process pricing the system-created non-usage events and non-system-created events as they become available to the system", where "the pricing process includes pricing the system-created non-usage events and/or the non-system-created events independent of a billing process."

Block is limited to a billing system calculating charges including taxes and flat rates in connection with a subscriber's initiation of a call, and thus, Block does not teach or suggest "pricing system-created non-usage events and non-system-created events as they become available" and "independent of a billing process", as recited in claim 1.

Claim 2

Claim 2 is directed to an event pricing system where "all events are priced as they become available to the system." Block does not teach or suggest these features of claim 2, and thus, it is submitted that the rejection of claim 2 should be reversed.

Claim 3

Claim 3 calls for a system where "all system-created events are created at any time based on a flexible schedule independent of a billing process." Block does not teach or suggest these features of claim 3, and thus, it is submitted that the rejection of claim 3 should be reversed.

Claim 4

Claim 4 calls for a system where "system initiated and created events for a customer may be created in one of less frequently than the customer is billed, as frequently as the customer is billed and more frequently than the customer is billed."

Block is limited charging a client responsive to a subscriber's initiation of a call, and thus does not teach or suggest the above-discussed features of claim 4, and thus, it is submitted that the rejection of claim 4 should be reversed.

Claim 5

The system claimed in claim 5 is directed to creating and maintaining "summary events in real-time as events are priced." Block does not teach or suggest these features of claim 5, and thus, it is submitted that the rejection of claim 5 should be reversed.

Claim 6

Claim 6 calls for a system where "all events are available for contribution to summary records for discounting and consolidation." Block does not teach or suggest these features of claim 6, and thus, it is submitted that the rejection of claim 6 should be reversed.

Claim 7

Claim 7 is directed to a system where “charges for all events that are relevant to a billing period are calculated and available in the system at the earliest practical time.” Block does not teach or suggest these features of claim 7, and thus, it is submitted that the rejection of claim 7 should be reversed.

Claim 8

Claim 8 also recites that the system includes, “processing for calculating charges to be billed in a current billing period is outside the billing process.” Block does not teach or suggest these features of claim 8, and thus, it is submitted that the rejection of claim 8 should be reversed.

Claim 9

Claim 9 calls for a system where “charges for all unbilled events are ready for the billing process and ready for display on-demand.” Block does not teach or suggest these features of claim 9, and thus, it is submitted that the rejection of claim 9 should be reversed.

Claim 10

Claim 10 is directed to a system where the pricing process “performs real-time recalculation of a charge for any unbilled event when information in the system which impact the charge has changed.” Block does not teach or suggest these features of claim 10, and thus, it is submitted that the rejection of claim 10 should be reversed.

Claim 11

Claim 11 is directed to a computer implemented event pricing process, including “determining whether a system initiated and created non-usage event independent of user initiated events is priceable” and “pricing the non-usage event responsive to the determining”, where “the pricing includes pricing the non-usage event independent of a billing process that includes a non-system-created event.”

Charges in Block are only triggered by a subscriber’s call. Block does not teach or suggest the above-discussed features of claim 11, and thus, it is submitted that the rejection of claim 11 should be reversed.

Claim 12

Claim 12 calls for a process according to which “priceable events are priced immediately.” Block does not teach or suggest these features of claim 12, and thus, it is submitted that the rejection of claim 12 should be reversed.

Claim 13

Claim 13 is directed to a process where “all charge events are priced in real-time.” Block does not teach or suggest these features of claim 13, and thus, it is submitted that the rejection of claim 13 should be reversed.

Claim 14

The claimed computer implemented event pricing process of claim 14, includes “determining, by a computer, whether an event is priceable” and “pricing, by the computer, the event responsive to the determining”, where “all available system initiated and created non-usage events independent of user initiated events for a current billing period are priced at a first opportunity after a prior billing period that includes non-system-created events ends.”

Block does not teach or suggest, “pricing responsive to the determining”, where “all available system initiated and created non-usage events independent of user initiated events for a current billing period are priced at a first opportunity...”, as recited in claim 14.

Thus, it is submitted that the rejection of claim 14 should be reversed.

Claim 15

Claim 15 calls for a process where “a usage event is priced at a time that the usage occurs.” Block does not teach or suggest these features of claim 15, and thus, it is submitted that the rejection of claim 15 should be reversed.

Claim 16

Claim 16 recites that “a recurring charge is calculated after an end of a prior billing period and before the billing date for the recurring charge.” Block does not teach or suggest these features of claim 16, and thus, it is submitted that the rejection of claim 16 should be reversed.

Claim 17

Claim 17 calls for a process where “a minimum or a maximum charge is calculated and captured in a summary after an end of a prior billing period and before the billing date for the

recurring charge.” Block does not teach or suggest these features of claim 17, and thus, it is submitted that the rejection of claim 17 should be reversed.

Claim 18

Claim 18 calls for a process where “charges for summary events are calculated on-demand at a time of charge display.” Block does not teach or suggest these features of claim 18, and thus, it is submitted that the rejection of claim 18 should be reversed.

Claim 19

Claim 19 is directed to a computer implemented event pricing process, including “determining, by a computer, whether a system initiated and created non-usage event independent of user initiated events is due to be created” and “creating, by the computer, the non-usage event responsive to the determining.” As such, the event pricing process includes “pricing, by the computer, the non-usage event responsive to the creating”, where “the pricing includes pricing the non-usage event independent of a billing process that includes a non-system-created event.”

Pricing and billing are not independent in Block, and thus, it is submitted that the rejection of claim 19 should be reversed.

Claim 20

Claim 20 calls for a process where “system initiated and created events are created independent of other processes.” Block does not teach or suggest these features of claim 20, and thus, it is submitted that the rejection of claim 20 should be reversed.

Claim 21

Claim 21 is directed to a process wherein “system initiated and created events are created according to a schedule in the system.”

Block is limited to pricing upon user’s initiation of a call and summary information of Jagadish is updated in real-time as calls are placed, thus Block and Jagadish, alone or in combination, do not teach or suggest the features of claim 21.

Therefore, it is submitted that the rejection of claim 21 should be reversed.

Claim 22

Claim 22 is directed to a process where “[a] schedule is created and maintained by the system based on subscription information available in the system.”

Block and Jagadish, alone or in combination, do not teach or suggest these features of claim 22, and thus, it is submitted that the rejection of claim 22 should be reversed.

Claim 23

Claim 23 calls for a process where “a recurring event is created after an end of a prior billing period and before the billing date for the recurring charge.” Block does not teach or suggest these features of claim 23, and thus, it is submitted that the rejection of claim 23 should be reversed.

Claim 24

Claim 24 is directed to a process where “minimum and maximum charge summary events are created after an end of a prior billing period and before the billing date for the recurring charge.” Block does not teach or suggest these features of claim 24, and thus, it is submitted that the rejection of claim 24 should be reversed.

Claim 25

The system recited in claim 25 includes, “a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events has become current.” As also recited in claim 25, the system includes “a continuously running pricing process pricing the system-created non-usage events and non-system-created events as they become available to the system, and creating and maintaining summary events in real-time as events are priced.” As such, the pricing process comprises “pricing the system-created non-usage events and/or the non-system-created events independent of a billing process.”

Block does not teach or suggest, “pricing the system-created non-usage events and non-system-created events as they become available... independent of a billing process”, as recited in claim 25.

Thus, it is submitted that the rejection of claim 25 should be reversed.

Claim 26

Claim 26 is directed to an event pricing system, including “a continuously running event creation process” and “a continuously running pricing process.” The event pricing system includes, “determining whether a system initiated and created non-usage event independent of user initiated events is due to be created and creating system-created non-usage events at any time based on a flexible schedule” and “independent of a billing process, pricing of the system-created, non-usage and non-system-created events as ready for the billing process for display as they become available.” As such, the system creates “summary events as events are being priced” and performs “real-time recalculation of a charge for any unbilled event when information in the system which impacts charge has changed.

Block does not teach or suggest, “independent of a billing process, pricing of the system-created, non-usage and non-system-created events as ready for the billing process for display as they become available”, as recited in claim 26.

Thus, it is submitted that the rejection of claim 26 should be reversed.

Claim 27

The event pricing apparatus of claim 27 calls for “a source of system initiated and created non-usage events independent of user initiated events” and “a processor pricing the non-usage events when the events are priceable.” Claim 27 also recites that the pricing includes, “pricing the non-usage event independent of a billing process that includes the user initiated events.”

Block does not teach or suggest, “pricing the non-usage events when the events are priceable” and “pricing the non-usage event independent of a billing process that includes the user initiated events”, as recited in claim 27.

Thus, it is submitted that the rejection of claim 27 should be reversed.

Claim 28

Claim 28 is directed to a computer readable storage medium including “an event pricing process controlling a computer and having a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events is due to be created.” As also recited in claim 28, the event pricing process includes “a continuously running pricing process pricing the system-created non-usage events

and non-system-created events as they become available to the system”, where “the pricing process includes pricing the system-created non-usage events and/or the non-system-created events independent of a billing process.”

Block does not teach or suggest, “pricing [including] pricing the system-created non-usage events and/or the non-system-created events independent of a billing process”, as recited in claim 28.

Thus, it is submitted that the rejection of claim 28 should be reversed.

Claim 29

Claim 29 calls for a system providing pricing information for on-demand billing for events, including “a message queue receiving events including system initiated and created non-usage events and usage events” and “a processor performing a pricing process.” As also recited in claim 29, “non-usage and usage events independent of user initiated events are continuously delivered to the pricing process via the message queue and priced as they become available independent of a billing process.”

Block does not teach or suggest, “continuously” delivering non-usage and usage events “independent of user initiated events” to the pricing process “via the message queue” for pricing “independent of a billing process”, as recited in claim 29.

Thus, it is submitted that the rejection of claim 29 should be reversed.

Claim 30

Claim 30 is directed to “storing events in a message queue, the events being system initiated and created non-usage events, usage events, one time events, and summary events” and “delivering the events in the message queue to a pricing process as they become available, the delivered events including events independent of user initiated events.” As such the system includes, “pricing including pricing the non-usage events independent of a billing process that includes the user initiated events.”

Block and Jagadish, alone or in combination, do not teach or suggest, “delivering the events in the message queue to a pricing process as they become available” and “pricing including pricing the non-usage events independent of a billing process that includes the user initiated events”, as recited in claim 30.

Thus, it is submitted that the rejection of claim 30 should be reversed.

Claim 31

Claim 31 recites, “a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events is due to be created and creating the non-usage event when due.” Claim 31 further recites, “a continuously running pricing process pricing the system-created non-usage events and non-system-created events including usage events as they become available to the system producing priced events”, where the pricing process including pricing the system-created non-usage events and/or the non-system-created events independent of a billing process” and “an intermittently running billing process running responsive to bill cycles and customer on demand billing information requests.”

Block does not teach or suggest, “a continuously running pricing process pricing the system-created non-usage events and non-system-created events including usage events as they become available” and “pricing the system-created non-usage events and/or the non-system-created events independent of a billing process”, as recited in claim 31.

Thus, it is submitted that the rejection of claim 31 should be reversed.

Claim 32

Claim 32 is directed to an event pricing process including, “receiving system initiated and created non-usage events independent of user initiated events” and “pricing the system initiated and created non-usage events as soon as the events are received.” The pricing recited in claim 32 includes, “pricing the non-usage events independent of a billing process that includes the user initiated events.”

Block does not teach or suggest, “pricing the system initiated and created non-usage events as soon as the events are received” and “pricing the non-usage events independent of a billing process that includes the user initiated events”, as recited in claim 32.

Thus, it is submitted that the rejection of claim 32 should be reversed.

Claim 33

Claim 33 calls for a method for a continuous real-time calculation of a bill including, executing the real-time calculation of the bill each time an event independent of a user's initiation occurs”, where the processing of the real-time calculation of the bill is “independent of a billing process having an event responsive to the user's initiation.” Claim 33 further recites,

“continuously reflecting the event independent of the user’s initiation on the bill and maintaining a summary total for the bill”, where the bill includes “the event independent of the user’s initiation displayed to the user on-demand and/or provided to the user in accordance with the billing process.”

Block does not teach or suggest, “a continuous real-time calculating of a bill” including “continuously reflecting the event independent of the user’s initiation”, as recited in claim 33.

Thus, it is submitted that the rejection of claim 33 should be reversed.

Claim 34

Claim 34 is directed to a method of continuous bill calculation including, “determining whether a non-usage event independent of a user initiated event and a usage event initiated by a user are available for pricing.” As such, the pricing for the non-usage event and the usage event is executed based on “determination of availability for pricing”, where “the non-usage event is available for pricing at a first billing period and the usage event is available for pricing at a second billing period.”

Block and Jagadish, alone or in combination, do not teach or suggest pricing the non-usage and usage events based on “determination of availability for pricing”, where “the non-usage event is available for pricing at a first billing period and the usage event is available for pricing at a second billing period”, as recited in claim 34.

Thus, it is submitted that the rejection of claim 34 should be reversed.

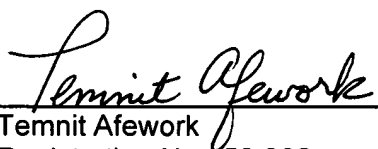
XI. CONCLUSION

It is submitted that claims 1-34 patentably distinguish over the cited references.
Accordingly, reversal of the Examiner's rejection is respectfully requested.

Respectfully submitted,

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Date: 12/21/2006

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X. CLAIMS APPENDIX (37 CFR § 41.37(c)(1)(viii))

1. (PREVIOUSLY PRESENTED) An event pricing system, comprising:
at least one computer having:
a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events is due to be created and creating the non-usage event; and
a continuously running pricing process pricing the system-created non-usage events and non-system-created events as they become available to the system, where the pricing process includes pricing the system-created non-usage events and/or the non-system-created events independent of a billing process.
2. (ORIGINAL) A system as recited in claim 1, wherein all events are priced as they become available to the system.
3. (ORIGINAL) A system as recited in claim 1, wherein all system-created events are created at any time based on a flexible schedule independent of a billing process.
4. (PREVIOUSLY PRESENTED) A system as recited in claim 3, wherein system initiated and created events for a customer may be created in one of less frequently than the customer is billed, as frequently as the customer is billed and more frequently than the customer is billed.
5. (ORIGINAL) A system as recited in claim 1, wherein summary events are created and maintained in real-time as events are priced.
6. (ORIGINAL) A system as recited in claim 1, wherein all events are available for contribution to summary records for discounting and consolidation.
7. (ORIGINAL) A system as recited in claim 1, wherein charges for all events that are relevant to a billing period are calculated and available in the system at the earliest practical time.
8. (ORIGINAL) A system as recited in claim 1, wherein processing for calculating

charges to be billed in a current billing period is outside the billing process.

9. (ORIGINAL) A system as recited in claim 1, wherein charges for all unbilled events are ready for the billing process and ready for display on-demand.

10. (ORIGINAL) A system as recited in claim 1, wherein said pricing process performs real-time recalculation of a charge for any unbilled event when information in the system which impact the charge has changed.

11. (PREVIOUSLY PRESENTED) A computer implemented event pricing process, comprising:

determining, by a computer, whether a system initiated and created non-usage event independent of user initiated events is priceable; and

pricing, by the computer, the non-usage event responsive to the determining, where the pricing includes pricing the non-usage event independent of a billing process that includes a non-system-created event.

12. (PREVIOUSLY PRESENTED) A process as recited in claim 11, wherein priceable events are priced immediately.

13. (ORIGINAL) A process as recited in claim 11, wherein all charge events are priced in real-time.

14. (PREVIOUSLY PRESENTED) A computer implemented event pricing process, comprising:

determining, by a computer, whether an event is priceable; and

pricing, by the computer, the event responsive to the determining, wherein all available system initiated and created non-usage events independent of user initiated events for a current billing period are priced at a first opportunity after a prior billing period that includes non-system-created events ends.

15. (ORIGINAL) A process as recited in claim 11, wherein a usage event is priced at a time that the usage occurs.

16. (ORIGINAL) A process as recited in claim 11, wherein a recurring charge is calculated after an end of a prior billing period and before the billing date for the recurring charge.

17. (ORIGINAL) A process as recited in claim 11, wherein a minimum or a maximum charge is calculated and captured in a summary after an end of a prior billing period and before the billing date for the recurring charge.

18. (ORIGINAL) A process as recited in claim 11, wherein charges for summary events are calculated on-demand at a time of charge display.

19. (PREVIOUSLY PRESENTED) A computer implemented event pricing process, comprising:

determining, by a computer, whether a system initiated and created non-usage event independent of user initiated events is due to be created; and

creating, by the computer, the non-usage event responsive to the determining; and

pricing, by the computer, the non-usage event responsive to the creating, where the pricing includes pricing the non-usage event independent of a billing process that includes a non-system-created event.

20. (PREVIOUSLY PRESENTED) A process as recited in claim 19, wherein system initiated and created events are created independent of other processes.

21. (PREVIOUSLY PRESENTED) A process as recited in claim 19, wherein system initiated and created events are created according to a schedule in the system.

22. (ORIGINAL) A process as recited in claim 21, wherein said schedule is created and maintained by the system based on subscription information available in the system.

23. (ORIGINAL) A process as recited in claim 19, wherein a recurring event is created after an end of a prior billing period and before the billing date for the recurring charge.

24. (ORIGINAL) A process as recited in claim 19, wherein minimum and maximum charge summary events are created after an end of a prior billing period and before the billing date for the recurring charge.

25. (PREVIOUSLY PRESENTED) An event pricing system, comprising:
a computer having:
a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events has become current; and
a continuously running pricing process pricing the system-created non-usage events and non-system-created events as they become available to the system, and creating and maintaining summary events in real-time as events are priced, where the pricing process includes pricing the system-created non-usage events and/or the non-system-created events independent of a billing process.

26. (PREVIOUSLY PRESENTED) An event pricing system, comprising:
a computer having:
a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events is due to be created and creating system-created non-usage events at any time based on a flexible schedule; and
a continuously running pricing process, independent of a billing process, pricing of the system-created, non-usage and non-system-created events as ready for the billing process and for display as they become available to the system with all events priced as they become available to the system and creating summary events as events are being priced and performing real-time recalculation of a charge for any unbilled event when information in the system which impacts charge has changed.

27. (PREVIOUSLY PRESENTED) An event pricing apparatus, comprising:
a source of system initiated and created non-usage events independent of user initiated events; and
a processor pricing the non-usage events when the events are priceable, where the pricing includes pricing the non-usage event independent of a billing process that includes the user initiated events.

28. (PREVIOUSLY PRESENTED) A computer readable storage medium including an event pricing process controlling a computer and having a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events is due to be created, and a continuously running pricing process pricing the system-created non-usage events and non-system-created events as they become available to the system, where the pricing process includes pricing the system-created non-usage events and/or the non-system-created events independent of a billing process.

29. (PREVIOUSLY PRESENTED) A system providing pricing information for on-demand billing for events, comprising:

a message queue receiving events including system initiated and created non-usage events and usage events; and

a processor performing a pricing process where non-usage and usage events independent of user initiated events are continuously delivered to the pricing process via the message queue and priced as they become available independent of a billing process.

30. (PREVIOUSLY PRESENTED) A continuous pricing process for an event-driven system, comprising;

storing events in a message queue, the events being system initiated and created non-usage events, usage events, one time events, and summary events;

delivering the events in the message queue to a pricing process as they become available, the delivered events including events independent of user initiated events; and

pricing the events, the pricing including pricing the non-usage events independent of a billing process that includes the user initiated events.

31. (PREVIOUSLY PRESENTED) An event pricing system, comprising:

at least one computer having:

a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events is due to be created and creating the non-usage event when due;

a continuously running pricing process pricing the system-created non-usage events and non-system-created events including usage events as they become available to the system producing priced events, the pricing process including pricing the system-created non-usage

events and/or the non-system-created events independent of a billing process; and
an intermittently running billing process running responsive to bill cycles and customer on demand billing information requests and producing a bill using the priced events.

32. (PREVIOUSLY PRESENTED) An event pricing process using a computer, comprising:

receiving system initiated and created non-usage events independent of user initiated events; and

pricing, by the computer, the system initiated and created non-usage events as soon as the events are received, where the pricing includes pricing the non-usage events independent of a billing process that includes the user initiated events.

33. (PREVIOUSLY PRESENTED) A method for a continuous real-time calculation of a bill using a computer, comprising:

executing the real-time calculation of the bill each time an event independent of a user's initiation occurs, the processing of the real-time calculation of the bill being independent of a billing process having an event responsive to the user's initiation; and

continuously reflecting the event independent of the user's initiation on the bill and maintaining a summary total for the bill, where the bill including the event independent of the user's initiation is displayed to the user on-demand and/or is provided to the user in accordance with the billing process.

34. (PREVIOUSLY PRESENTED) A method of continuous bill calculation using a computer, comprising:

determining whether a non-usage event independent of a user initiated event and a usage event initiated by a user are available for pricing; and

executing the pricing for the non-usage event and the usage event based on determination of availability for pricing, where the non-usage event is available for pricing at a first billing period and the usage event is available for pricing at a second billing period.

XI. EVIDENCE APPENDIX (37 CFR § 41.37(c)(1)(ix))

Not applicable.

- XII. RELATED PROCEEDINGS APPENDIX (37 CFR § 41.37(c)(1)(x))**
Not applicable.